DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

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Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-004406 Address: 333 Burma Road **Date Inspected:** 13-Oct-2008

City: Oakland, CA 94607

OSM Arrival Time: 1400 **Project Name:** SAS Superstructure **OSM Departure Time:** 2200 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Xu Le Feng No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:**

Yes No N/A **Delayed / Cancelled: Bridge No:** 34-0006 **Component:** tower skin assembly, tower single diaphragms

Summary of Items Observed:

Heavy Bay 1

Caltrans Quality Assurance Inspector George Goulet (QA Inspector) responded to a ZPMC "Notification of Witness Inspection" to perform final 100% VT and 10% MT on stiffener to angle clip welds at the diaphragms 9M and 13M on SSD1-skin A assembly. Numerous indications were observed while QA Inspector was performing VT. QA Inspector immediately informed ABF QC Yang Ye Heng, who was present and QA Inspector left the area to perform other inspections.

Heavy Bay 2

ABF informed the QA Inspector that ESD1-skin "D" stiffener to skin plate welds are ready for inspections and green tagging. QA Inspector, along with Caltrans Quality Assurance Inspector Paul Dawson (QA Inspector 2), performed random visual inspections of ESD1 Skin "D" stiffener to skin plate welds and observed various weld locations that have areas in excess of 1 mm in depth below flush at the top of the welds and some welds have had the bottom toe ground and the weld profiles now have overlap conditions. QA Inspector identified 11 locations that need rework, including removal of weld spatter and cleanup of weld relief holes. ZPMC CWI Xu Le Feng was informed of these issues. Note: ZPMC is in the process of welding upper stiffener connection plates and the stiffener to skin plates below these plates could not be inspected due to weld and grinding debris. Also all weld relief holes require grinding to obtain smooth clean weld surfaces.

QA Inspector performed final MT, 10% of the total linear distance, on the following skin plate SAW butt welds: ESD1-SA298G/G-4, 6, 12, and 15; ESD1-SA298A/G-10B, 13B, 16B, and 17B. No apparent indications were observed.

WELDING INSPECTION REPORT

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Summary of Conversations:

As noted in Summary.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Joshua Ishibashi, 136-6471-0411, who represents the Office of Structural Materials for your project.

Inspected By:	Goulet,George	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer